

WHAT IS CLAIMED IS:

1. A navigation system comprising:
 - a receiver to receive updated route speed information;
 - an input device to receive a destination point from a driver;
 - a GPS locator to identify the position of the receiver;
 - a computational system to select a fastest route from the position of the receiver to the destination point using the updated route speed information; and,
 - an output device to communicate the fastest route to the driver.
2. The navigational system of claim 1 further comprising:
 - a transmitter to transmit data that includes the speed of the navigation system as well as a location of the navigation system to a central processing point, the central processing point to use the received car data in generating updated route speed information.
3. The navigation system of claim 2 wherein the speed of the navigation system is determined by changes in a GPS signal.
4. The navigation system of claim 2 wherein the speed of the navigation system is computed from speed sensing electronics coupled to the navigation system.

5. The navigation system of claim 1 wherein the updated route speed information is transmitted in an embedded cellular signal.

6. The navigation system of claim 1 wherein the updated route speed information is embedded in an Internet compatible format for transmission through a transmission system.

7. The navigation system of claim 1 wherein the receiver receives information directly from a plurality of informer vehicles.

8. The navigation system of claim 1 wherein the receiver is in asynchronous communication with a transmitter.

9. The navigation system of claim 1 wherein the receiver periodically receives data from the internet when the navigation system passes through a coverage area with wireless internet access.

10. The navigation system of claim 1 further comprising:

a storage device for storing the updated route speed information when the navigation system passes through a coverage area that enables download of updated route speed information.

11. The navigation system of claim 1 further comprising:
 - a storage device for storing GPS data and times associated with the GPS data, the GPS data and the times associated with the GPS data to be uploaded when in a transmission range.
12. The navigation system of claim 1 wherein the updated route speed information also includes information on accidents and road closures.
13. The navigation system of claim 1 wherein the output device is a display screen in a vehicle.
14. The navigation system of claim 1 wherein the route speed at a point is computed based on the fastest moving vehicle near the point.
15. The navigation system of claim 14 wherein the location of a vehicle is used to determine whether a fastest moving vehicle that is in a carpool lane.
16. A system for improving traffic flow comprising:
 - a receiving unit for receiving transmission signals from a plurality of vehicles, each vehicle transmitting a location and a speed;

a processing unit that processes the location and speed of each vehicle to determine a route speeds at various points on streets in a region; and,

a transmitting unit to transmit route speed information at the various points to a plurality of navigation units.

17. The system of claim 16 further comprising:

a navigation unit to receive the route speed information and to combine the route speed information with a current position received from a GPS signal to plot a fastest route to a destination from the current position received from the GPS signal.

18. The navigation system of claim 17 wherein the navigation unit further transmits a signal indicating a speed and position of the navigation unit.

19. The system of claim 16 wherein the transmitting unit receives signals from a navigation unit and only transmits route speeds at points requested by the navigation unit.

20. The system of claim 16 wherein the transmission signals originate from a plurality of navigation units.

21. The system of claim 16 wherein the receiving unit and the processing unit is in the receiving vehicle.

22. The system of claim 16 wherein the receiving unit and the processing unit is at a stationary central processing point.

23. A method of computing a fastest route in a receiving vehicle from a current location of the receiving vehicle to a destination comprising:

determining a current location using a GPS system;

receiving information on a destination point;

receiving updated route speed information; and,

computing a fastest route from the current location to the destination point taking into account the updated route speed information.

24. The method of claim 23 wherein the receiving of updated route speed information is received from a central processing point.

25. The method of claim 23 wherein the receiving of updated route speed information is received from a informing vehicle

26. The method of claim 23 wherein the updated route speed information is generated by monitoring the speed of informer vehicles along the fastest route.

27. The method of claim 23 wherein the receiving vehicle also serves as an informing vehicle, the method further comprising:

generating updated route speed information by monitoring the speed of the receiving vehicle; and,

transmitting the position and speed of the receiving vehicle.